

**WHAT IS CLAIMED IS:**

1. A double sensing face motor structure comprising:

a base board, defining an axial hole, a plurality of coils mounted around a periphery of the axial hole in an equally spaced annular manner, a sensor member mounted on the base board;

two rotors, respectively located on an upper side and a lower side of the base board to integrally combine with each other, each of the two rotors provided with a permanent magnet respectively mating with the coils of the base board; and

a central shaft, combined to a center of each of the two rotors, and rotatably mounted in the axial hole of the base board in a positioning manner.

2. The double sensing face motor structure as claimed in claim 1, wherein the base board is provided with a plurality of breaches for receiving the plurality of coils.

3. The double sensing face motor structure as claimed in claim 1, wherein the center of at least one rotor is provided with a central seat for allowing tight insertion of the central shaft.

4. The double sensing face motor structure as claimed in claim 1, further comprising a shaft seat secured on the axial hole of the base board, the shaft seat provided with a bearing for rotatably receiving the central shaft.

5. The double sensing face motor structure as claimed in claim 1, wherein the central shaft has one end integrally formed with the two rotors.

6. The double sensing face motor structure as claimed in claim 1, wherein the two rotors are combined with each other by the central shaft.

1           7. The double sensing face motor structure as claimed in claim 1,  
2 wherein at least one rotor is provided with blades.

3           8. The double sensing face motor structure as claimed in claim 1,  
4 wherein one rotor is provided with blast typed blades, and the other rotor is  
5 provided with axial flow typed blades.

6           9. The double sensing face motor structure as claimed in claim 1,  
7 wherein the sensor member is mounted at a corner position of the coil.

8           10. The double sensing face motor structure as claimed in claim 1,  
9 further comprising a start member mounted on the base board.

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